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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/556,823	04/17/2006	Takeshi Suzuki	8003-1040	1712

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EXAMINER	
KRAUSE, ANDREW E	
ART UNIT	PAPER NUMBER
4152	
MAIL DATE	DELIVERY MODE
08/04/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/556,823	SUZUKI ET AL.	
	Examiner	Art Unit	
	ANDREW KRAUSE	4152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11/15/2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/15/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 11/15/2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The specification to which the oath or declaration is directed has not been adequately identified. Examiner notes that boxes for 'attached hereto' or 'was filed on' are not checked. See MPEP § 602.

The examiner notes the following minor informality: inventor 4, Mr. Atsushi Chino did not date his signature.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Laminated Metal Sheet for Use in Cans.

4. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:
(1) if a machine or apparatus, its organization and operation;
(2) if an article, its method of making;
(3) if a chemical compound, its identity and use;
(4) if a mixture, its ingredients;
(5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

5. The abstract of the disclosure is objected to because of grammatical and linguistic errors. Correction is required. See MPEP § 608.01(b).

6. The disclosure is objected to because of the following informalities: the specification is replete with terms which are not clear, concise and exact. Appropriate correction is required.

Examples of some unclear, inexact or verbose terms used in the specification are: 'for can' (numerous), 'there have been given the…' (Page 1, line 8), 'described in above' (Page 2, line 13), 'for can, which laminated metallic sheet has...' (Page 3, line 3), the last paragraph on page 3, 'The inventors...conducted detail studies..., which film' (page 5, line 4).

Claim Objections

7. **Claims 1-5** are objected to because of the following informalities: 'for can' should be changed to 'for use in cans'. Appropriate correction is required.

8. **Claim 5** objected to because of the following informalities: Page 18, line 1: 'in the Laser Raman spectrometry' should be changed to 'in the Laser Raman spectra'. Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. **Claims 1-5** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention. Independent **claims 1** and **5** are indefinite because the limitations related to characteristics in the Raman merely recite what the product will do, rather than what it is.

11. Claims merely setting forth physical characteristics desired in the article, and not setting forth specific compositions which would meet such characteristics, are invalid as vague, indefinite, and functional since they cover any conceivable combination of ingredients either presently existing or which might be discovered in the future and which would impart the desired characteristics. See Ex parte Slob, 157 USPQ 172.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. **Claims 1, 3 and 5** are rejected under 35 U.S.C. 102(b) as being anticipated by **Okude** (JP 2001001448 A.

(Claim 1) Okude discloses a laminated metallic sheet for use in cans, comprising a polyester resin film containing about 50% by mole or more (see section [0021],"in this invention Resin containing polyethylene terephthalate, such as polyethylene terephthalate / isophthalate copolymerization resin film, a film of only polyethylene

terephthalate, and a film that carried out various change of the concentration of isophthalic acid, can be used" is interpreted to mean that the film can be 100% polyethylene terephthalate, or contain less as the amount of isophthalic acid added to the copolymer is increased) of polyethylene terephtalate on at least one side of the metallic sheet (see sections [0001], [0002], [0009]), and showing about 22 to about 25 cm^{-1} of half value width of shift peak caused by a C=O stretching vibration at 1730±20 cm^{-1} in the Raman spectra, using a linear polarization of laser light, on the film of the laminated metallic sheet for use in cans after heat treatment (see sections [0008], [0009], [Claim 1]).

14. **(Claim 3)**In addition to meeting the limitations of claim 1 (see above), **Okude** also discloses the metallic sheet, wherein the polyester resin Is a copolyester containing about 50% by mole or more of ethylene terephthalate component (see section [0021], possible compositions of the resin are disclosed, including a film of only polyethylene terephthalate, and a polyethylene terephthalate/isophthalate copolymer that can be composed by varying the amount of isophthalate incorporated in the polymer).

15. **(Claim 5) Okude** discloses a laminated metallic sheet for use in cans (see [0001]), having excellent workability after heat treatment (see [0002], [0005], [0018]), comprising a polyester based resin containing polyethylene terephthalate as a main component being laminated on the metallic sheet (see [Claim 1] of Okude, [0002], [0009]), and showing 22 to 25 cm^{-1} of half value width of Raman shift peak caused by C=O stretching

vibration in the vicinity of 1730±20 cm^{-1} in the Laser Raman spectra, using a linear polarization laser light, on the film surface layer of the laminated metallic sheet for use in cans after heat treatment[see [Claim 1] of Okude, [0008], [0009]).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

18. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Okude** (JP 2001001448 A) as applied to claim 1 above, in view of **Hamano** (JP 11157007 A).

19. **Okude** teaches the limitations of **claim 1** as stated above.

20. **Okude**, however, fails to teach the laminated metallic sheet for use in cans, wherein the heat treatment is at least one treatment selected from the group consisting of baking finish and baking print.

21. **Hamano** teaches the heat treatment of metallic sheets for use in cans, wherein the heat treatment is baking finish (see section [0005], [0012] or baking print (see section [0005],[0021], [0022]) for the purpose of improving the durability of the laminated metal sheet (see sections [0005], [0012], [0021], [0022] and Derwent abstract).

22. It would have been obvious to one of ordinary skill in laminated metallic sheet art to have modified **Okude** with the use of a baking finish or baking print heat treatment as taught by **Hamano** because these treatments improve the crack resistance of the film (see section [0001] of Hamano). These procedures are commonly used to apply coatings on laminated metallic sheets for use in cans to improve appearance, or to provide information about the contents inside. Since all the claimed elements were known in the prior art and one skilled in the art could have combined the metallic sheet for can as disclosed by **Okude** with the heat treatments as disclosed by **Hamano** using known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

23. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Okude** (JP 2001001448 A) as applied to **claim 3** above, in view of Watanabe (JP 2057339 A).

24. **Okude** teaches the limitations of **claim 3** (see above 35 U.S.C. 102 rejection).

25. **Okude** also teaches the laminated metallic sheet for use in cans as in **claim 3**, wherein the copolyester is a copolyeseter obtained from terephthalic acid and isophaltic acid (see section [0021]).

26. **Okude** fails to teach that the copolymer is also obtained from ethylene glycol.

27. **Watanabe** teaches a laminated metal sheet for use in cans, wherein the polyeseter resin is a copolyester obtained from terephthalic acid, isophthalic acid and ethylene glycol (see Derwent abstract, 'a glycol component comprising 2-5C').

28. It would have been obvious to one of ordinary skill in laminated metallic sheet art to have modified **Okude** with the use of a copolyester resin film obtained from terephthalic acid, isophthalic acid and the ethylene glycol as taught by **Watanabe** to produce a laminated metal sheet for use in cans that is inexpensive and prevents the taste or flavor of the contained product from being compromised (see **Watanabe** translation page 3, final 2 lines). One skilled in the art would know that to form copolyester derived from terephthalic acid and isophthalic acid that a linking substrate, such as ethylene glycol, is required to form the polyester backbone. All the claimed elements were known in the prior art and one skilled in the art could have combined

the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5,424,121 A, US 5,753,377 A, US 5,846,642 A, US 6,086,978 A, US 6,610,378 B1, US 6,905,774 B2, WO 02072346 A1, JP 2001-21496 A.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW KRAUSE whose telephone number is (571)270-7094. The examiner can normally be reached on M-Th, 6:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Del Sole can be reached on (571)272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ANDREW KRAUSE/

Examiner, Art Unit 4152

AEK

/Joseph S. Del Sole/
Supervisory Patent Examiner, Art Unit 4152